

**TWO-COMPONENT (EPOXY/AMINE) STRUCTURAL FOAM-IN-PLACE MATERIAL**

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**ABSTRACT**

10 The present invention relates to methods, materials, and products for forming a  
foamed product, comprising the steps of combining an epoxy-based component with an  
amine-based component. The epoxy component is cross-linked through a  
polymerization reaction catalyzed by the amine formulation. In this regard, a reactive  
mixture or exothermic reaction is created between the epoxy component and the amine  
component when combined. The heat generated by the exothermic reaction softens a  
thermoplastic shell of a blowing agent formulated within the epoxy component thereby  
enabling a solvent core within the thermoplastic shell of the blowing agent to expand  
15 from the heat generated by the exothermic reaction.